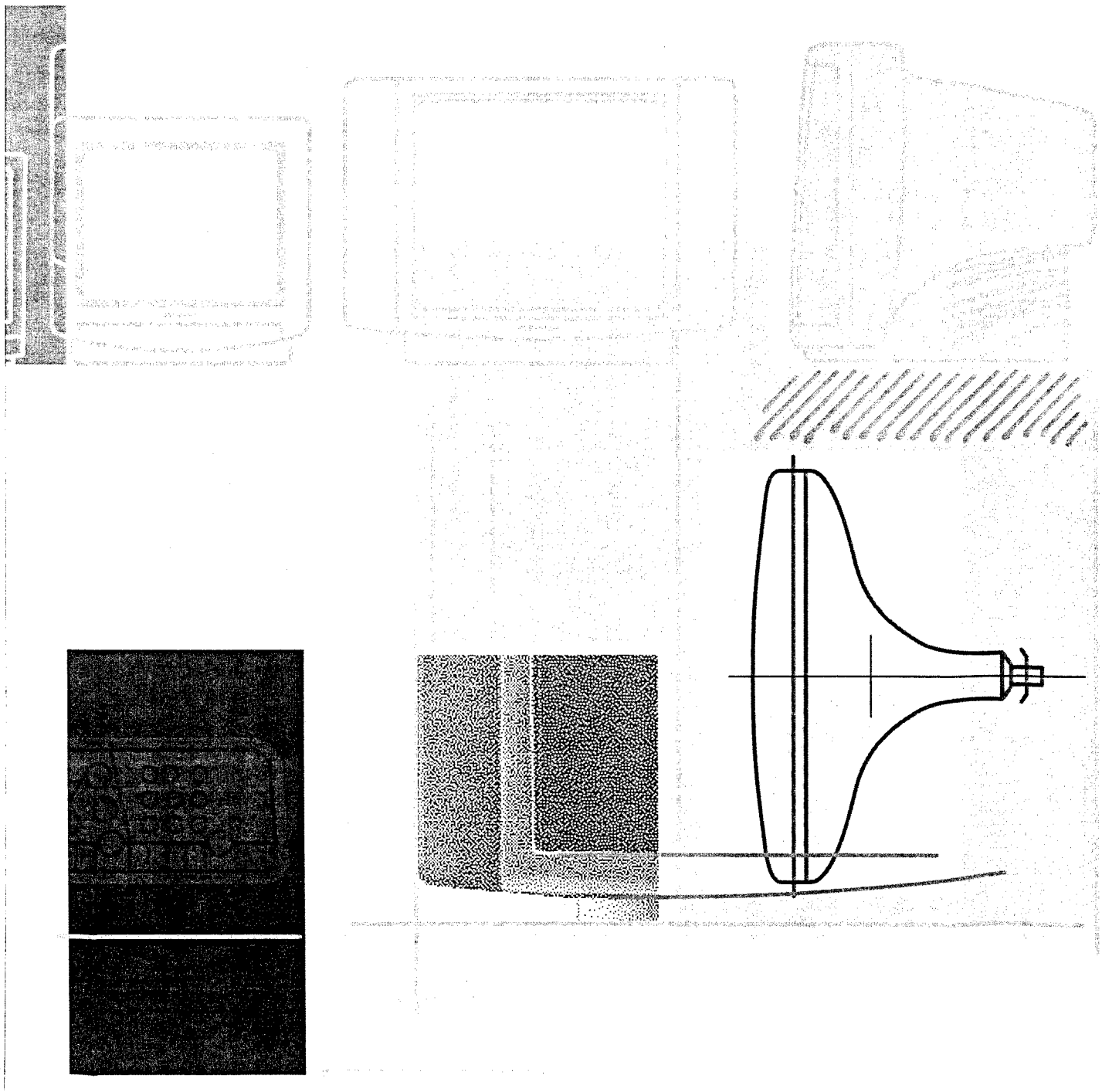
# GRUNDIG

## COLOR TELEVISION

## ST 63-775 DPL
## ST 70-775 DPL

DOLBY SURROUND
PRO • LOGIC



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Environmentally relevant information is marked using this symbol..

## Notes on the environment by Grundig

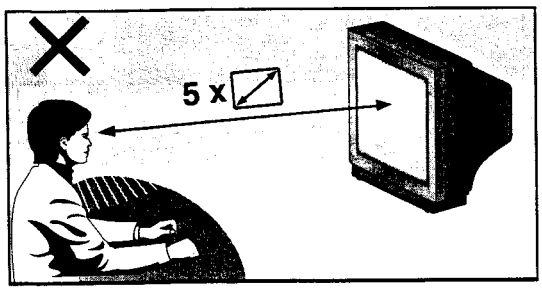
Technology and ecology combine into a convincing overall concept with this TV set. Ecologically high-quality materials are used exclusively. The housing contains a high amount of recyclable parts from used plastics and the surface colours used are water-based, partly recycled. Wherever possible, painting of individual housing parts has been omitted. Due to the optimized housing construction, flame protection materials have been omitted. The number of plastic types has been reduced through and through in order to ensure high-quality recycling when the set is put out of use – all larger plastic parts are marked. For optimum re-use, this TV set has been constructed in such a way as to make dismantling very easy.

# Safety and installation

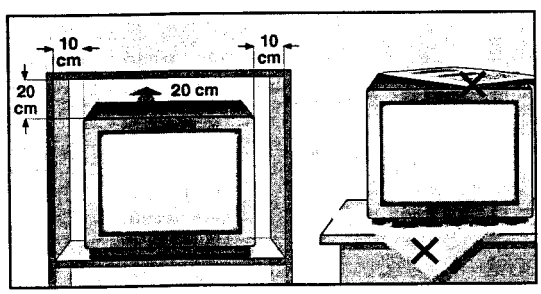
## Dear customer

In order that you may enjoy the entertainment of this high-quality comfortable TV set for a long time it is very important that you observe the following points when installing the set.

! The ideal position for viewing is 5 times the diagonal width of the screen.
External lights in the direction of the screen have a negative influence on picture quality.




! Sufficient space inside cabinets in a corresponding location.




! Do not place any covers on the ventilation slits.

! Heat could build up inside the set.
Heat building up inside the set causes danger and has a negative influence on the life expectancy of the set. From time to time, have a specialist remove the particles which have collected inside the set.

! Do not damage the mains supply cable.

! Do not set up any magnetic fields (e.g. loudspeakers) near the set.

! Make sure that no liquids or external objects penetrate the appliance (danger of short circuits).

! Clean the screen with a soft damp cloth only.Use only clear water.

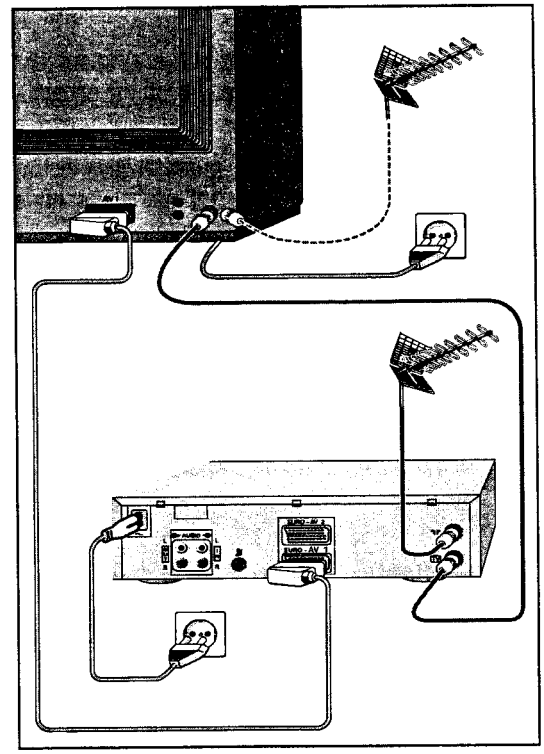
! Avoid damage by lightning by removing the mains and aerial cables.
Even if the set is switched off, damage can occur due to lightning striking the mains supply and/or the aerial cable.

! Opening and maintenance of the set may be carried out only by authorized service personnel.

! This TV set is designed to receive and reproduce picture and sound signals.
Any other use is expressly prohibited.

# Connections

## Example of connections (TV set and video recorder)



# Preparations

## Inserting batteries in the remote control

! Observe polarity in the battery case.

i When the batteries are spent a prompt » Battery « will appear on the screen.

Spent batteries must always be removed. Dispose of spent batteries in an environmentally safe manner.

## Switching the set on

1 Press button ⏻ on the set.

The display lights up.
Use number buttons ①...⓪ AV or the ⚠ button on the remote control to switch the TV set on completely.

## Switching the set to standby

1 Press button ⏻ on the remote control.

The set is not switched off completely.

i The set can be switched back on using the remote control.

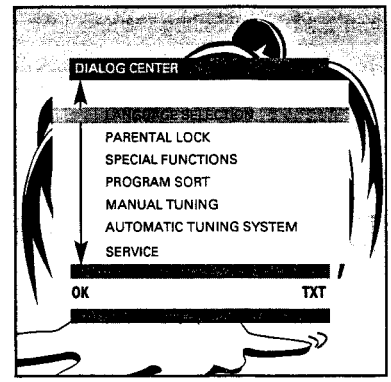
## Switching the set off completely

i If you are not using the set for a longer period of time (e.g. at night), then switch the set off completely.
This saves energy.

1 Press button ⏻ on the set.

# The DIALOG CENTER as a user guide

The DIALOG CENTER and the individual pages of the user guide display the possible functions and the buttons on the remote control with which these functions may be activated.




Button symbols and dialogue lines display possible operating steps.

The characters on the screen are symbols for the following buttons on the remote control:

| Symbol | Button | Function |
|---|---|---|
| ▲ ▼ | ⚠ ▽ | Selects lines or functions step by step on a page. |
| ◄ ► | ◄ ► | Changes settings. |
| i | ⓘ | Calls up the DIALOG CENTER (ⓘ and OK) and switches back from the pages to the DIALOG CENTER. |
| OK | OK | Confirms functions. |

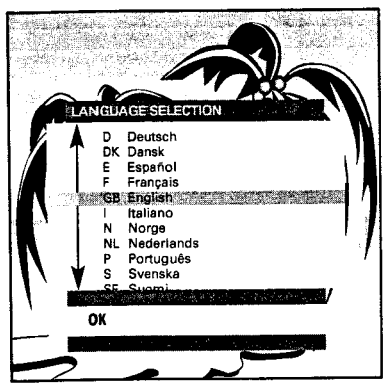
i Please memorize these buttons, they are required repeatedly for the following operating steps!

# Assigning programme positions with the automatic tuning system ATS

The set is equipped with the automatic programme position search system ATS which carries out programme position assignment for you.

You start the automatic search and may afterwards sort the programmes in a sequence of your choice. You may also delete programmes which have been found more than once or those with bad reception from the programme list.

1 After switching on the set the first time the page » LANGUAGE SELECTION « appears.




i A selection can be made from several languages for the dialogue between you and the TV. The user guide displays appear in the selected language.

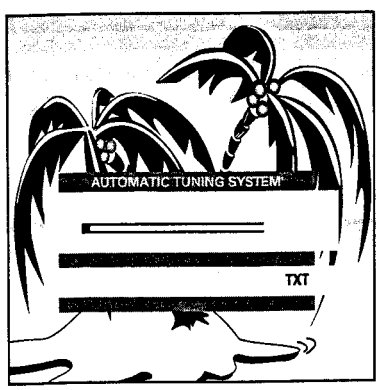
2 Select the dialogue language with button ▽ or △ and confirm with the [OK] button.

## Setting unit location (country)

3 Select » Adjust country « with the ▽ or button △ and confirm with the [OK] button.

If you do not find your country in the list, then select » **Others** « and confirm with the [OK] button.

The page » AUTOMATIC TUNING SYSTEM « appears.



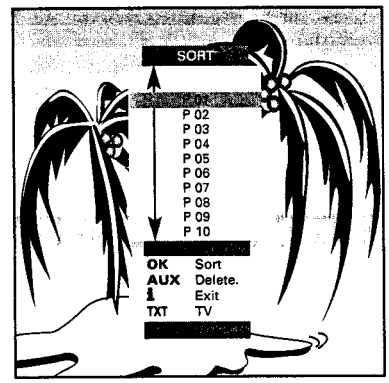

i The page » AUTOMATIC TUNING SYSTEM « can also be called up directly from the » DIALOG CENTER «.

4 Start the » AUTOMATIC TUNING SYSTEM « with the [OK] button.

i Depending on the number of programs received, this activity can take one minute or longer.

i The programm search can be cancelled with the TXT button.

i After searching, the set switches to program position 1 and the page » SORT « appears.




## Sorting programmes

1 Select the programme which is to be re-sorted by pressing button ▽ or △.

2 Mark the programme with the [OK] button.

3 Select a new programme position with button ▽ or △.

4 Save the setting with the [OK] button.

i To sort more programmes, repeat, beginning with step [1].

5 Exit setting by pressing TXT.

## Deleting programmes

1 Select the programme to be deleted with button ▽ or △.

2 Delete the programme with the AUX button.

i To delete more programmes, repeat, beginning with step [1].

3 Exit setting by pressing TXT.

i Pages » AUTOMATIC TUNING SYSTEM «, » SORT « (under » Programme sorting «) and » LANGUAGE SELECTION « can also be called up directly from the » DIALOG CENTER «.

## Limiting the programme position selection

The ATS search saves all programmes it has found and automatically "locks" the first position to which no program is assigned. In this way, when programme positions are selected step by step ("zapping"), using buttons ▽ or △ ,only programmes which have been found can be selected.

You may also enter this limit manually, in the example the "lock" has been activated as of programme position 6.

1 Press the ⓘ button and then [OK].

The page » DIALOG CENTER « will appear on the screen.

2 Select the line » MANUAL TUNING « using button ▽ or △ and confirm with [OK].

3 Select programme position 6 on the » MANUAL TUNING « page with the ◀ or ▶ button.

4 Select the line called » channel «, then select » 00 « using number buttons ⓪ ... ⑨.

5 Save this setting with [OK] and exit using button TXT.

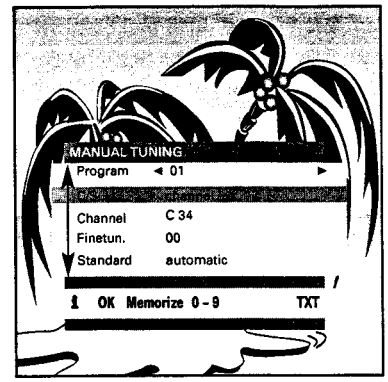
The first 5 programmes can now be selected in fast sequence, the following programme positions can no longer be selected using ▽ or △. All programme positions may still be selected using number buttons ⓪ ... ⑨.

## Manual Tuning

1 Press the ⓘ button and then the [OK] button.

The "DIALOG CENTER" is displayed.

2 Select the "MANUAL TUNING" line with the ▽ or △ button and confirm with the [OK] button.




3 Select the "C/S" line with the ▽ or △ button then use the ◀ or ▶ button to select "Channel" or "Special Channel".

4 Select the "Channel" line with the ▽ or △ button. Enter the desired channel number with the numeric buttons ⓪ ... ⑨ or start the automatic station search with the blue button.

i When adjusting TV channels, the colour and audio standards are automatically assigned. If the colour and/or the sound is not correct, select the "Standard" line with the ▽ or △ button then select the required option with the ◀ or ▶ button.

5 If the picture requires finetuning, select the "Finetuning" line with the ▽ or △ button then finetune the picture with the ◀ or ▶ button.

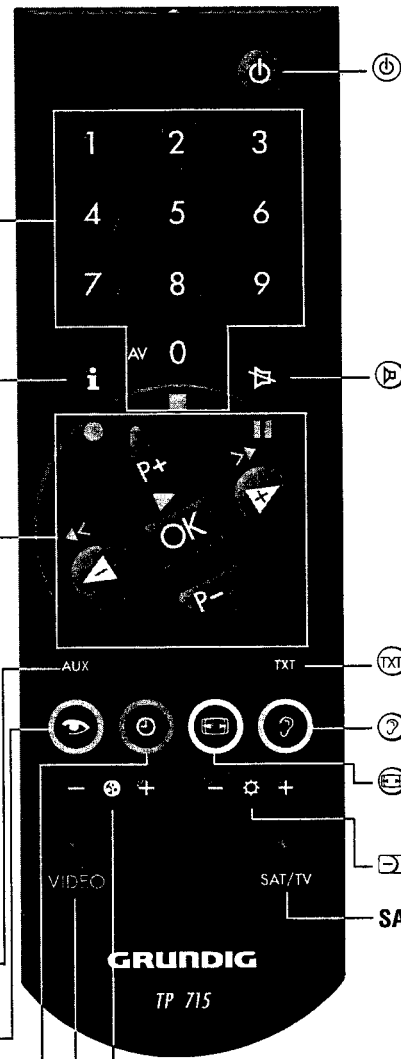
6 Store the settings with the [OK] button.

i For tuning in further channels, repeat the procedure from step [3] on.

7 Press the TXT button to terminate the setting.

# Short description for TV operation

On this page the buttons of the remote control are only briefly explained. Detailed descriptions can be found in the various chapters.




- ⓪ ... ⑨ Switch on set from standby; or select programme position.
- AV⓪ Select AV.
- ⓘ Call up »DIALOG CENTER« (button ⓘ and OK).
- Move forwards from one programme position to the next (1, 2, 3 ...).
- Move backwards from one programme position to the next (... 3, 2, 1); or
- Move the cursor up/down.
- Volume; or
- Move the cursor to the left/right.
- OK Changes and activates several functions, Switches to optimum values (button **AUX** and OK).
- ⓐ Select »Aux« menu; sound selection (with ⓐ and **2**).
- Select »Picture« menu.
- Clock ON/OFF (Time display only for TV programmes with videotext).
- **VIDEO** Remote control GRUNDIG video recorder (keep **VIDEO** button depressed).

- ⏻ Switch set to standby.
- Audio on/off (mute).
- TXT Videotext operatation ↔ TV operation
- Select »SOUND« menu.
- Switch picture format from 4:3 to 16:9 (at AV programme position).
- Adjust brightness.
- **SAT** Remote control GRUNDIG satelliten receiver (keep **SAT** button depressed and select satellite program using button **P+** or **P-**).
- Adjust colour intensity

## Remote control video recorder

You may also use the remote control for this TV set to operate a GRUNDIG video recorder. Your specialist dealer can inform you on which ones are suitable.

Press the **VIDEO** button and keep it depressed.
This converts the remote control to video recorder operation.
Now press the required button.
The following list tells you which button operates which recorder functions.

- ◀◀ (button ◀) = Frame search backwards
- ▶▶ (button ▶) = Frame search forward
- ● (button ⓘ) = Start recording
- ■ (button AV⓪) = Stop
- ▶ (button OK) = Playback
- = Program position –
- = Program position +
- ❚❚ (Taste Ⓟ) = still

## Picture tuning

If you would like to make individual picture adjustments, you may do this using the menu page »Picture« or using the remote control buttons.

### Call up the »Picture« menu

1 Press button ⓔ.

The menu page »Picture« appears.

2 Select the desired adjustment by pressing ▽ or △.

i The following adjustments are all terminated by pressing button ⓣ.

### Contrast

The set has been tested using maximum contrast, in order to check for reliability of all modules.
Depending on the location of the set and the brightness in the room (surrounding light) it does however make sense to reduce contrast slightly for the best possible picture impression.

1 Adjust »Contrast« using button ◀ or ▶.

### Sharpness

This allows you to adjust optimum picture sharpness according to your wishes.

1 Adjust »Sharpness« using button ◀ or ▶.

### Brightness and colour contrast

i Press »–« (minus) or »+« (plus) of the corresponding button until the desired adjustment is obtained.

1 Adjust »Brightness« with button ⊖☼⊕.

2 Adjust »Colour contrast« (colour intensity) using button ⊖◑⊕.

### Switching the picture format to 16:9

If the set receives a PALplus transmission via video recorder, camcorder or a PALplus decoder the picture format must be switched to 16:9. This is possible on an AV programme position or a programme position with an activated decoder.

1 Press button ▭ until the message »16:9« appears.

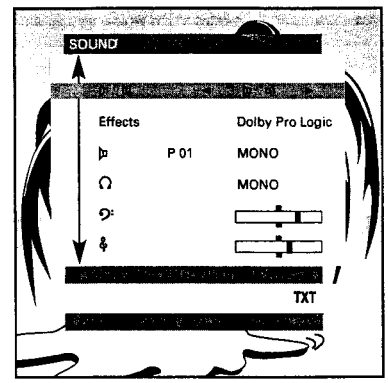
## Sound tuning

To make individual picture adjustments, select the menu page »Sound«.

### Select the menu »Sound«

1 Press button ⓢ.

The menu page »Sound« appears.




2 Select the desired adjustment using button ▽ or △.

i The following adjustments are all terminated using button ⓣ.

### Sound (stereo/two-tone, mono)

If the device receives two-tone transmissions – e.g. a film in the original on sound channel B (display: »DUAL B«) and the synchronized version on sound channel A (display: »DUAL A«) – then you may select the desired sound channel.

If the set receives stereo or NICAM transmissions, it automatically switches to stereo sound (display: Stereo).
If the stereo reception is bad, then the sound should be switched to »Mono«.

1 Select the line »♭ Sound P01« and using button ◀ or ▶ select the desired sound type; »Mono« or »Stereo« and for two-tone transmissions »Dual A« or »Dual B«.

2 If the sound for a particular programme is to be permanently in mono, then select the line »♭ Sound P« and press the [OK] button.

i To reverse the function, repeat step [2] and press the [OK] button again.

### Treble, bass

Tone settings can be adjusted to your individual wishes.

1 Select the line »𝄢« (bass) or »𝄞« (treble) and make the desired adjustment using ◀ or ▶.

# Dolby Surround Pro Logic*

## Important Information

This system has been developed to allow you to enjoy the dramatic realism and impact of multi-channel Dolby movie theater sound in your own home.

The Dolby Surround Pro Logic signal comprises:
the stereo channels (right/left),
the centre channel,
the surround channel.

With Dolby Surround, the sound created by the conventional stereo channels (right/left) is improved by an additional centre channel which makes it possible to precisely locate the origin of the individual tones.
This centre channel fixes the voices (dialogues) in the sound centre (corresponding to the picture).
The Surround channel (also called back channel) completes the sound system. Two additional loudspeakers which are located behind the listener create the actual "Surround" sound, that is the realistic sound atmosphere (depth of space, special effect sounds). The listener is "placed inside the action".

With the Dolby Surround Pro Logic system, the sound/picture sources can be laser discs, video cassettes, and television broadcasts.

## Loudspeaker Systems

The TV receiver is supplied with two surround loudspeaker boxes and one centre loudspeaker. These loudspeakers and the build-in loudspeakers allow for the Dolby Surround Pro Logic sound.

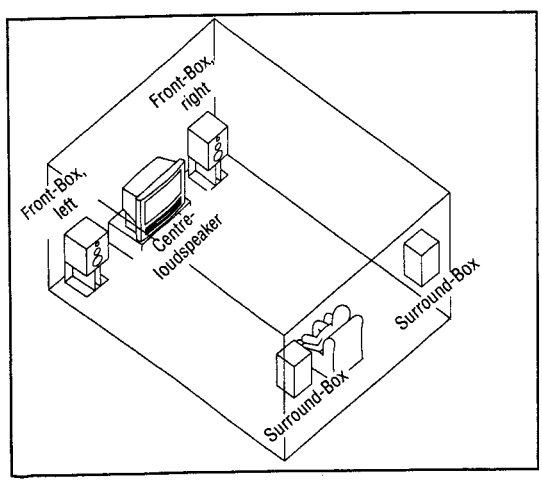
It is possible to connect external front loudspeakers, or

you can use the build-in loudspeakers as centre loudspeaker instead of the centre loudspeaker supplied with the TV set (see page 11, Audio Settings for Dolby mode).

### Equipment for Dolby Surround Pro Logic

To get the optimum sound quality from the Dolby Surround Pro Logic system, five loudspeaker boxes are necessary.

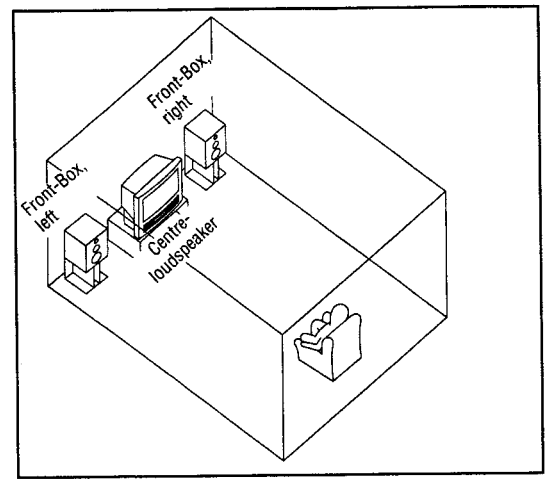
Front/left, 2 x surround, 1 x Centre



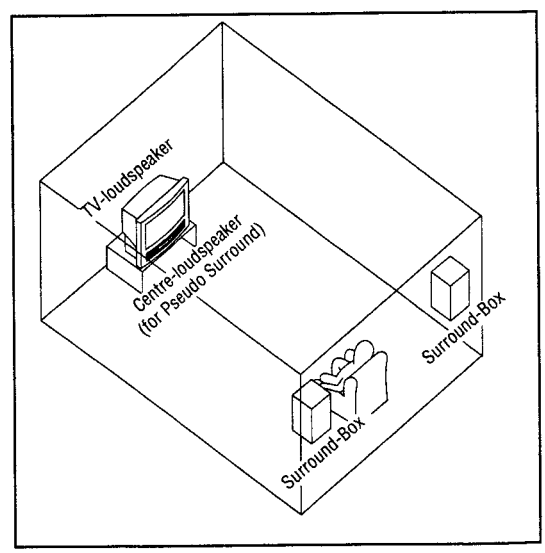

If you cannot install five loudspeaker boxes, you can still use the following Dolby operating modes:
Dolby 3 Stereo, or
Pro Logic Phantom, or
Panoramo, or
Pseudo Surround.

With these operating modes, it is not possible to get the optimum sound impression such as with Dolby Surround Pro Logic.

### Equipment for Dolby 3 Stereo




### Equipment for Pro Logic Phantom and Pseudo Surround




### Equipment for Panorama mode

For the Panorama mode, no additional loudspeakers are required.

This function is only possible if the option "▷ .. ◁ TV L/R" have been selected in the audio menü (see page 11, Audio settings for Dolby mode)

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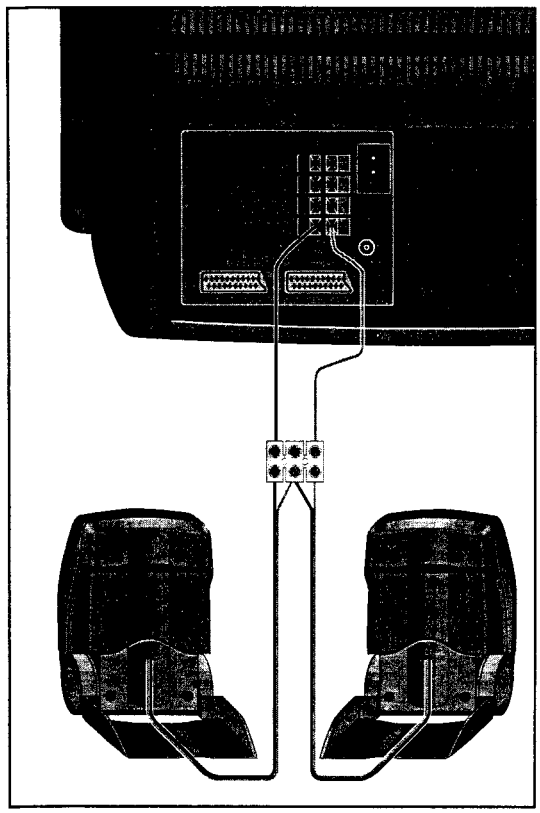
## Connecting the Loudspeaker Boxes

### Connecting the Surround boxes supplied



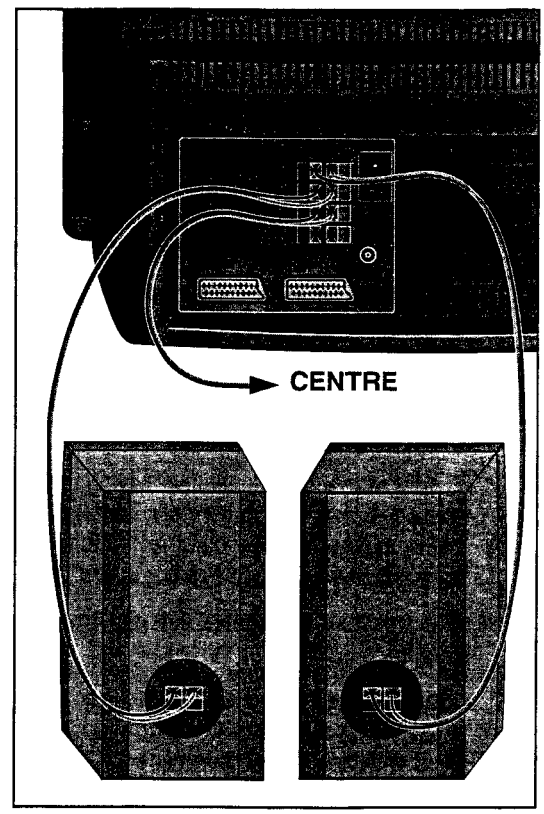
1 Connect the two surround boxes with the screw terminal supplied (serial connection, see figure).

2 Connect the surround boxes to the clamping terminals marked "Surround". To insert the loudspeaker wires, press down the clamping levers. Insert the – core of the loudspeaker cable into the black (–) terminal and the + core of the loudspeaker cable into the red (+) terminal.

### Connecting the front stereo loudspeakers and the centre loudspeaker supplied

1 Connect the front loudspeakers (min. impedance 4 Ω) to the clamping terminals "L" (left) and "R" (right) and the centre loudspeaker supplied to the clamping terminals marked "Centre". To insert the loudspeaker wires, press down the clamping levers. Insert the – core of the loudspeaker cable into the black (–) terminal and the + core of the loudspeaker cable into the red (+) terminal.

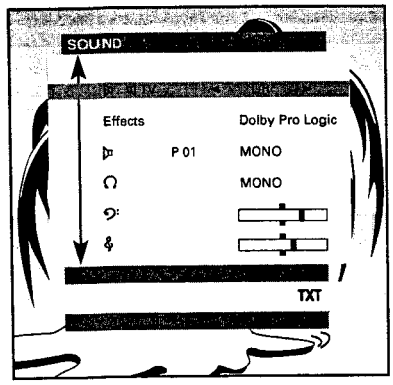
i The lateral distance of the front boxes to the TV set should be at least 1.5.



## Audio Settings for Dolby Mode

1 Press the ⓘ button.

The "Audio" menu appears.

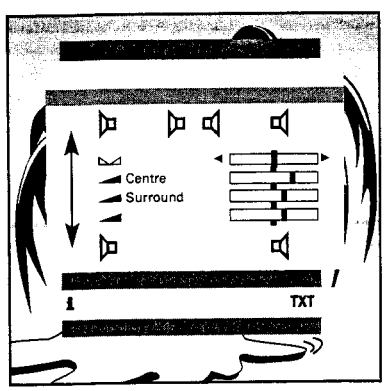



2 Select the "Effects" line. Use the ◀ or ▶ button to select the desired Dolby mode:
"off", "Dolby Pro Logic", "Dolby 3 Stereo", "Pro Logic Phantom", "Panorama", "Pseudo Surround".

3 Select the "🔈 .. 🔊 TV" line. Use the ◀ or ▶ button to select the desired loudspeaker configuration:

"L/R" the built-in loudspeakers are used as right/left loudspeakers.
"Center" the built-in loudspeakers are used as centre loudspeakers.
"off" the built-in loudspeakers are switched off. Select this option if you have connected external front/centre loudspeakers.

4 Press the OK button.
The menu for adjusting the loudspeaker levels is displayed.
You will hear a test signal (noise) from the loudspeakers.




The test signal is emitted in the following order: balance (right/left), centre loudspeaker, surround loudspeaker.
The highlighted cursor bar and the red loudspeaker symbol indicate which loudspeaker is currently emitting the test signal.
As long as the cursor bar is highlighted, it is possible to adjust the corresponding loudspeaker configuration.

5 Wait until "◺◿" (Balance) is highlighted.
Use the ◀ and ▶ buttons to adjust the front boxes so that they emit with the same sound level.

6 Wait until "◢ Centre" is highlighted.
Use the ◀ and ▶ buttons to adjust the centre loudspeaker so that it emits with the same sound level as the front loudspeakers.

7 Wait until "◢ Surround" is highlighted.
Use the ◀ and ▶ buttons to adjust the surround loudspeaker so that they emit with the same sound level as the front loudspeakers.

i During the setting procedure, the cursor bar remains on the selected position.
The test signal is emitted only by the selected loudspeakers.
When releasing the ◀ or ▶ button, the cursor bar jumps to the next position in the test signal order.

### Volume

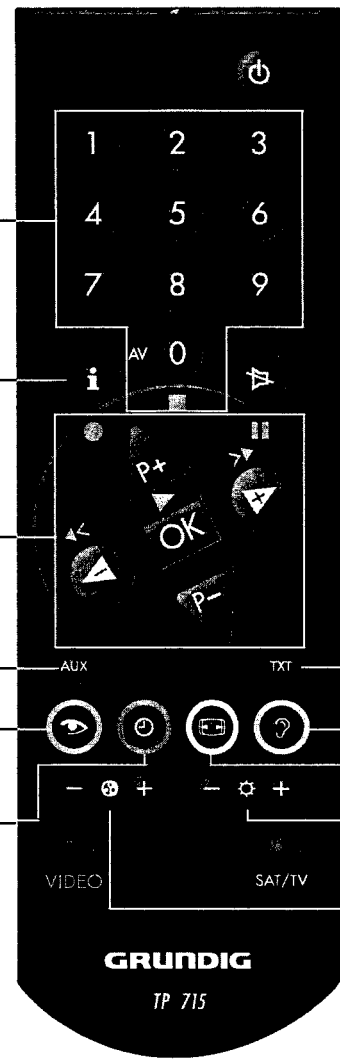
After having balanced all loudspeakers and speaker boxes, it is possible to adapt the global volume level by means of the "◢" (Volume) function to the room requirements.

1 Select the "◢ " menu line.
The cursor bar does not automatically jump to this position.

2 Use the ◀ and ▶ buttons to adjust the volume.

3 Press the TXT button to terminate the settings.

# Short description for videotext operation




① ... ⓪ Select videotext pages.

ⓘ Call up videotext table of contents.

▽, △ Page Catching. Select videotext pages directly and call up using the OK button.

AUX Call up symbol line (see below).

(red) Move on to next topic; Page back.

(green) Move on to next topic; Page forward .

TXT Videotext operation ↔ TV operation.

(blue) Move on to next topic; move on to next "100" page

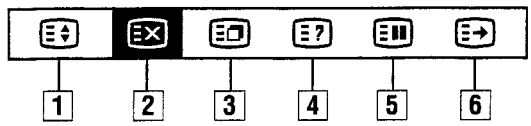
(yellow) Move on to next move on to next "10" page

» + « Answer release;
» – « Stop page.

» + « Enlarge page;
» – « Call up sub-page directly.

## Symbol explanatons

Make symbol line appear using button AUX.
Select function using button ◀ or ▶.
Call up function using OK.




**1** Enlarge character height.

**2** Bridge waiting time during TV operation.

**3** Call up sub-page directly.

**4** Answer release.

**5** Page-freeze.

**6** Language group selection.

## Videotext ...

... consists of a large number of text pages, for instance news from topics such as sport and politics, exchange markets, weather reports and all kinds of other information.

The scope of information offered by videotext as well as the way it is organised and the layout of individual pages varies from station to station.

### FLOF text operation

Various topics may be called up from the table of contents at the push of a button.

1 Switch on videotext using button TXT.

The table of contents page no. 100 or the videotext page last called up appears.

i An info line consisting of a red, green, yellow and blue text field appears at the bottom edge of the screen.
The remote control has similarly colour-coded buttons.

2 Select the desired topic using the blue red, green or yellow button.

3 Videotext pages may also be selected using the number buttons 0 ... 9.

4 Use button i to return to the table of contents page no. 100.

5 Switch off videotext using button TXT.

### Normal videotext operation

1 Switch on videotext with button TXT.

The table of contents page no. 100 or the videotext page last selected appears.

2 Select the videotext page. To do this, enter the page number using the number buttons 0 ... 9, always using three digits.

After a brief waiting period, the page appears.

3 Use the red or green button to page up or down inside the videotext pages.

4 Use the yellow button to page forward to the next "10" videotext page.

5 Use the blue button to page forward to the next "100" videotext page.

6 Use button i to page back to the table of contents page no. 100.

7 Switch off videotext with button TXT.

### Functions for both videotext operation types

These functions can be called up directly using the remote control buttons or using the dialogue on the videotext page.

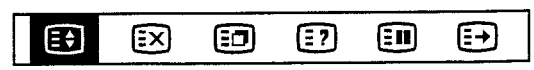
1 Switch on videotext with button TXT.

Enlarging the videotext page

1 Press » + « (plus) on button repeatedly,

or

1 Press button AUX, the symbol line appears at the bottom edge of the screen.



2 Select the symbol with button ◀ or ▶ and confirm with button OK.

3 Repeated pressing of OK results in:

double size letters in the top screen half;
double size letters in the bottom screen half;
normal picture.

## Page-freeze on multi-page displays

A multi-page display can contain several sub-pages which are "paged forward" within a certain time cycle by the broadcasting station.

Multi-page displays are marked. 3/6 indicates, for instance, that you are currently viewing page 3 of 6.

If you wish to view a sub-page for longer, then the page may be "frozen".

1 Press » – « (minus) on button ⊖☼⊕,

or

1 Press button AUX, the symbol line is displayed at the bottom edge of the screen.

2 Use button ◀ or ▶ to select the symbol and confirm with OK.

The page displayed is now » frozen «, is no longer updated, and switching over to other sub-pages no longer takes place.

3 Switch the function off with button OK.

## Calling up sub-pages directly

1 Press » – « (minus) on button ⊖☼⊕;

2 Select »Sub-page«, to do this enter the page number using the number buttons 0 ... 9, always using four digits.

After a brief waiting period, the page appears;

3 Switch off » Sub-page « with » – « (minus) on button ⊖☼⊕, the current sub-page appears.

or

1 Press button AUX, the symbol line appears at the bottom of the screen.

2 Use button ◀ or ▶ to select the symbol and confirm with OK.

The selected videotext page number, e.g. 155/0001 appears in the symbol line.

3 Select » Sub-page «, to do this enter the page number using the number buttons 0 ... 9, always using four digits.

After a brief waiting period, the page appears.

4 Switch off » Sub-page « with button OK, the current sub-page appears.

## Answer release

It is possible to let "hidden" answers appear in certain videotext pages or insert information (release), e.g. to solve puzzles,

or

in order to check VPS times for video recorder programming.

1 Press » + « (plus) on button ⊖☼⊕,

or

1 Press button AUX, the symbol line appears at the bottom of the screen.

2 Use button ◀ or ▶ to select the symbol and confirm with OK, the "hidden" information is inserted in the videotext page.

3 Switch off » Answer release « with button OK.

## » Page Catching « (selecting certain videotext pages directly and calling them up)

Many table of contents pages contain three-digit page numbers which may be selected directly. This saves entering of the page number.

1 Switch on » Page Catching « with button ▽ or △

» Page Catching → OK « is displayed at the top of the screen.

A bright rectangle blinks behind the first page number of the table of contents page.

2 Use button ▽ or △ to select the desired three-digit page number and confirm with OK, the page appears in the screen after a brief waiting period.

3 Use button i to return to table of contents page no. 100.

## Bridging waiting times

i You may use this function to bridge waiting times, during the time it takes for your videotext decoder to search for a page.

Assuming you would like to watch TV but still be informed, then first select the relevant page – e.g. page 143 – and then press:

1 press button AUX, the symbol line appears at the bottom edge of the screen.

2 Use button ◀ or ▶ to select the symbol and confirm with OK.

You will see the TV picture and the videotext symbol will appear at the top edge of the screen. Later, instead of the videotext symbol the number 143 appears, indicating that the page has been found.

3 Call up the page found with the OK button.
The videotext page appears.

4 Exit the function with TXT.

## Language group selection

Three language groups may be selected for the dialogue with the videotext.
The individual countries are stored in three European language groups:
Western Europe, Eastern Europe and Europe + Turkey.

Most European countries are contained in the Western European language group (WEST+ CZ, SK).

If you wish to call up videotext from broadcasting stations in Poland, the Czech Republic, Romania or from Yugoslavia, then select Eastern Europe (EAST).

If you wish to call up videotext from broadcasting stations from Turkey, then select the language group Europe + Turkey (WEST +TR).

1 Select the desired TV programme and call up the videotext with button TXT.

2 Press button AUX.

The symbol line appears at the bottom edge of the screen.

3 Use button ◀ or ▶ to select the symbol and confirm with button OK.

4 Select » Language gr. « with button ◀ or ▶ and confirm with OK.

5 Exit the function with TXT.

# Special functions

The following adjustments are carried out using the » DIALOG CENTER «.

Call up » DIALOG CENTER « with button ⓘ and button OK.

Adjustments are always terminated by pressing TXT.

## TV on with ...

If you frequently use the set as an AV monitor – e.g. together with a camera as a monitoring system or together with a satellite receiver – then this function can give priority to the programme position » AV «. After switching on with the on/off switch, instead of programme position » P 1 «, programme position » AV « will appear.

1 Select the line » SPECIAL FUNCTIONS « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Switch on TV with « and select the desired program position » Prog 1 « or » AV « with ◀ or ▶.

## Picture/sound scale

To adjust volume, brightness and colour contrast, scales appear. These may be switched off.

1 Select the line » SPECIAL FUNCTIONS « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Picture/sound opt. « and select » off « with button ◀ or ▶.

## Station name

Some broadcasting stations broadcast their station name. When changing programme position this is briefly displayed. You may switch this display off.

1 Select the line » SPECIAL FUNCTIONS « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Station name « and select » off « with button ◀ or ▶.

When changing programme position, only the number of the programme position is displayed.

## Equalizing the volume

The volume of normal TV broadcasts and commercials may be different. You may equalize this volume.

This functin is only possible if the options » Effects off « and »▷□ .. ◁| TV L/R« have been selected in zhe audio menu.

1 Select the line » SPECIAL FUNCTIONS « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Autom. vol. « and select »on« with button ◀ or ▶.

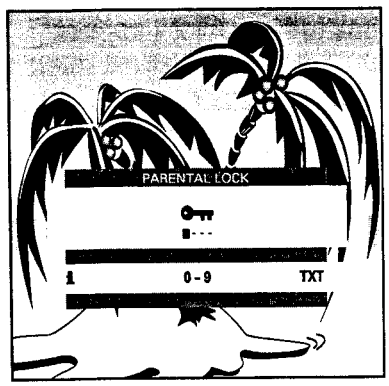
# Parental lock

Using this function, you may enter a number code which blocks all functions.

## Activating parental lock

1 Call up the » DIALOG CENTER «using buttons ⓘ and OK.

2 Select and call up the line » Parental lock «.




3 Enter a number code with the number buttons ⓪ ... ⑨, always using four digits (e.g. 1111).

4 Save the number code with OK.

i The key appears in red, switch off the page » PARENTAL LOCK « with button TXT.

After switching off the set and switching on again the page » Parental lock « appears, all functions are locked.

i Please take good note of the number code!
If you forget the number code, a number combination on the last page of this instruction manual will assist you. If you press these buttons in sequence on the remote control, the "lock" will be cancelled.

## Switching off parental lock

1 Switch on the set.

2 Enter a number code with the number buttons ⓪ ... ⑨, always using four digits (e.g. 1111).

The set switches to the TV screen. After switching off again the parental lock is activated again.

i To cancel the parental lock function, select and call up the line "Parental lock" from the » DIALOG CENTER «. Enter the number code with four digits and press button AUX.

# SERVICE page possibilities

i The following adjustments are carried out with the » DIALOG CENTER «.

Select the » DIALOG CENTER « with button ⓘ and OK.

i Adjustments are always terminated by pressing TXT.

## Manually adjusting the colour norm

When the programme search function assigns programme positions, an automatic colour norm assignment is made. If the colour of the various programmes is satisfactory, you need not carry out this adjustment.

1 Select the line » SERVICE « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Colour « and using ◀ or ▶ se-lect the required colour norm (PAL, NTSC or SECAM). The »Automatic« option cannot be selected.

## Manually adjusting the sound norm

1 Select the line » SERVICE « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Standard « and using button ◀ or ▶ select the required sound norm.

## Selecting a blue screen

This function allows you to switch over to a blue screen in the case of high visual interference.

1 Select the line » SERVICE « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line » Blue Screen « and using button ◀ or ▶ select » on «.

## Selecting a black screen

This function avoids screen flickering while changing programme positions.

1 Select the line » SERVICE « from the » DIALOG CENTER « with button ▽ or △ and confirm with OK.

2 Select the line »Black Screen« and using button ◀ or ▶ select » on «.

## Service Code

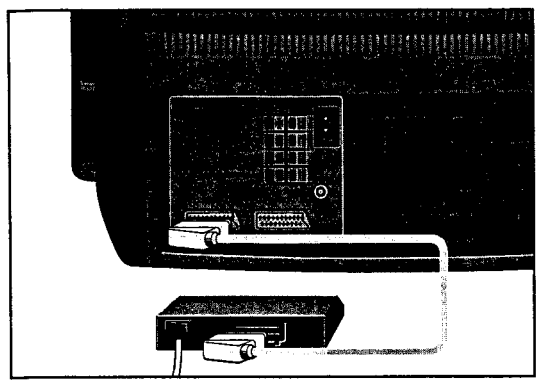
i The functions on this line are reserved for the service specialist.

# AUDIO/VIDEO connections

The TV set is equipped with a variety of socket connections. Various auxiliary devices – e.g. camcorder, video recorder, SAT receiver, SET TOP box, Pay TV decoder etc. – may be connected here.

## Connecting a decoder to the »AV 1« socket

Some stations – whose programs are received by cable or satellite receiver – encode their broadcasts. Both picture and sound become unrecognizable. A decoder will allow you to decode these programs.



i Alternatively, a satellite receiver may be connected to this socket or a video recorder.

### Connecting

1 Connect the »AV1« socket of the TV set and the corresponding socket of the decoder or satellite receiver with a EURO/AV (Scart) cable.

### Adjustment for decoder operation

1 Select the program position to which the encoded program is assigned.

The TV set automatically switches to program position »AV1«.

2 Call up the »DIALOG CENTER« with buttons ⓘ and OK.

3 Select and call up the line »SPECIAL FUNCTIONS«.

4 Select the line »Decoder P ..«. This line displays the programme position which was previously selected.

5 Press button ◀ or ▶ (choice between ON1, ON2, ON3 – this depends on the decoder used).

i This setting can also be activated on the »SERVICE« page for all program positions (1–79).

6 Exit with button TXT.

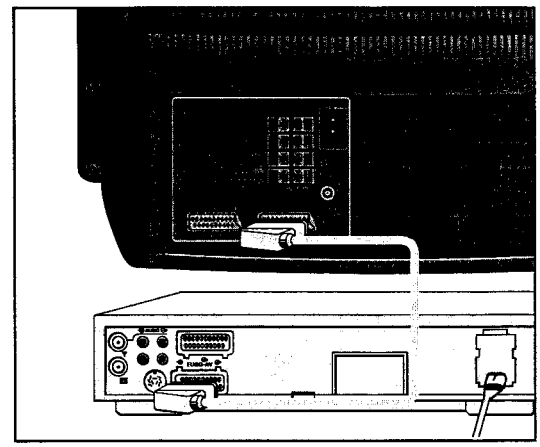
### Operation

1 Select the programme position to which the encoded programme is assigned;

or

for operation using a satellite receiver programme position, select »AV1« with button AV⓪.

## Connecting a video recorder or SET TOP box to the »AV 2« socket



1 Connect the »AV2« socket of the TV set and corresponding socket of the SET TOP box with a EURO/AV (Scart) cable.

2 Press button AV⓪ repeatedly until the set displays »AV2«.

### Playback

1 Switch on the video recorder or SET TOP box and select the desired function.

The TV set will let you see and hear the picture and sound information from the external device.

## Copying video tapes via the TV set

You may copy video recorder/camcorder tapes onto a video recorder.

The possibilities:

camcorder (AV3) to video recorder (AV1/2) video recorder (AV1) to video recorder (AV2) video recorder (AV2) to video recorder (AV1).

You may switch over to TV viewing during the recording.

i It is not possible to copy from a SVHS video/camcorder to a SVHS video/camcorder.

1 Select the AV program position with button AV⓪.

2 Press button AUX.

3 Activate the copy function with button AV⓪.

4 Start playback/copying on the camcorder/ video recorder.

Copying has started, you may now view any TV programme without interfering with the recording.

i Switch off the copy function, to do this repeat steps 1 to 3.

## Adjust video standard (VHS or SVHS)

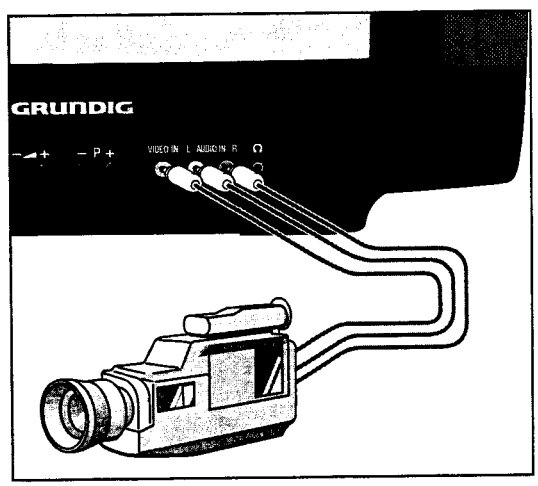
This adjustment depends on the video recorder connected.

1 Call up the » DIALOG CENTER « with buttons ⓘ and OK.

2 Select and call up the line » SPECIAL FUNCTIONS «.

3 Select and call up the line » Video « and using button ◀ or ▶ select » VHS « or » SVHS «.

## ❒ Connecting a camcorder to the » AV 3 « socket




## Picture signal

1 Connect the » VIDEO IN « socket of the TV set to the corresponding picture socket of the camera recorder.

## Sound signal (stereo or mono)

1 Connect the » L AUDIO IN R « socket of the TV set to the sound sockets of the stereo camcorder.

or

Connect the » L AUDIO IN « socket of the TV set to the sound socket of the mono camcorder.

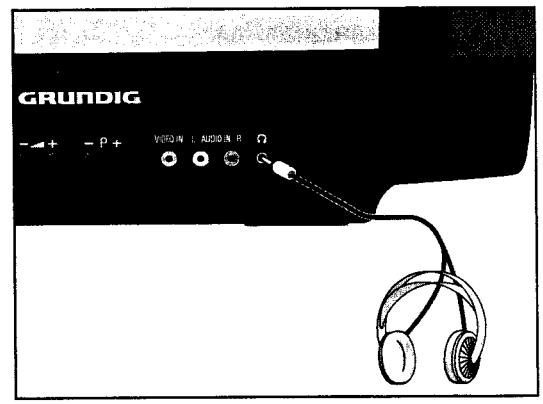
2 Press button AV⓪ repeatedly until the set displays » AV 3 «.

## Playback

1 Switch the camcorder on, insert the cassette and playback.

The TV set will let you see and hear the picture and sound information from the camcorder.

## ❒ Headphones




## Connecting

1 Insert the headphone connector (3.5 mm ø jack) into the headphone socket on the front side of the set.
The volume for the headphones may be adjusted separately (headphone impedance max. 32 Ω).

## Changing the sound (stereo/two-tone, mono) of the headphones

1 Select page » SOUND « with button ⓘ.

2 Select the line » ∩ « and with button ◀ or ▶ select the desired tone:

For stereo » stereo « or » mono «;
for Nicam stereo » stereo « or » analogue «;
for two-tone transmission » Dual A « or » Dual B «.

i Headphone sound change to mono, switchs TV speakers also to mono.

3 Switch off page » SOUND « with button TXT.

## Adjusting the volume of the headphones

1 Press button AUX and then adjust the volume of the headphones using button ◀ or ▶.

The altered value is displayed on a scale.

## Mains voltage:

220-240 V, 50/60 Hz
(Power supply control range 190 ... 264 V)

**"The appliance may only be operated using the mains cable set supplied. It prevents mains interference and is an integral part of the device approval".**

**For replacement purposes please order from an approved service specialist only the mains cable set with the description "GWN 9.22/part number 8290.991-386".**

## Power consumption:

approx. 75 W
Standby 5 W

## Reception range:

Channels C01 ... C99
Special channels S01 ... S41

## Sound output:

| | |
|---|---|
| without Dolby: | 36 W activ music power (18 W sine power = 2×9W) |
| In Dolby mode: | 60 W activ music power (30 W sine power = 2×9 W for built in loudspeaker; 3×4 W ext. front-boxes/ surround-boxes) |

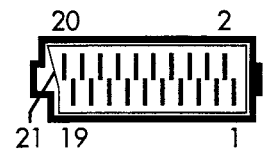
## Service notes for the service specialist:

Any improper modifications, in particular modification of the high voltage or installation of another type of picture tube, may lead to a high X-ray emission level. Sets modified in such a way no longer comply with this approval and may not be operated.

## Contact assignment EURO-AV socket

If you intend to connect auxiliary appliances to the TV set (e. g. computer, amplifier system), then your service specialist will be able to make a connection compatible with official standards by following the connection table below:

| Pin | | Signal |
|---|---|---|
| 1 | = | Audio output right |
| 2 | = | Audio input right |
| 3 | = | Audio output left |
| 4 | = | Audio earth |
| 5 | = | Blue earth |
| 6 | = | Audio input left |
| 7 | = | RGB blue input |
| 8 | = | Switching voltage |
| 9 | = | Green earth |
| 10 | = | Data cable |
| 11 | = | RGB green input |
| 12 | = | – |
| 13 | = | Red earth |
| 14 | = | earth |
| 15 | = | RGB red input (Chroma; S VIDEO) |
| 16 | = | RGB switching voltage |
| 17 | = | Video earth |
| 18 | = | RGB switching voltage earth |
| 19 | = | Video output |
| 20 | = | Video input |
| 21 | = | Shielding/earth |




### Warning

In case this appliance is supplied with a Safety Standard Approved mains lead fitted with a non-rewireable 13 Amp mains plug which, if unsuitable for your socket, should be cut off and an appropriate plug fitted by a qualified electrician. The fuse and fuse holder must be removed from the plug as accidental insertion of the redundant plug into a 13 Amp socket is likely to cause an electrical hazard.

Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13 Amp socket elsewhere.

If it is necessary to change the fuse in the non-rewireable plug, the correct type and rating (5 Amp ASTA or BSI approved BS 1362) must be used and the fuse cover must be refitted. If the fuse cover is lost or damaged the lead and plug must not be used until a replacement is obtained. Replacement fuse covers should be obtained from your dealer.

If a non-rewireable plug or a rewireable 13 Amp (BS 1363) plug is used, it must be fitted with a 5 Amp ASTA or BSI approved BS 1362 fuse. If any other type of plug is used it must be protected by a 5 Amp fuse either in the plug or at the distribution board.

Important:

The wires in the mains lead are coloured in accordance with the follow-ing code:

BLUE – NEUTRAL
BROWN – LIVE

As the colours of the wires in the mains lead of your appliance may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows:
Connect the BLUE coloured wire to plug terminal marked with the letter "N" or coloured black.
Connect the BROWN coloured wire to the plug terminal marked with a letter "L" or coloured red.
In no circumstance must any of the wires be connected to the terminal marked with a letter "E", earth symbol ⏚, coloured green or green and yellow.

Replacement mains lead can be obtained from your dealer.

**All rights to modifications and to errors reserved!**